

May 9 - 15, 2003

<P>The Terra spacecraft is operating nominally. All 5 instruments are in Science Mode.</P>

<P>The Terra instrument teams continue to analyze data and perform calibrations utilizing the results of the Deep Space Calibration (DSC) Maneuver conducted on March 26, 2003, and the Lunar DSC Maneuver conducted during the evening of April 14, 2003. The debrief for the Lunar DSC was conducted on Wednesday, May 14, 2003, at 8 p.m. EDT to accommodate the time difference with ASTER in Japan. A science meeting was held on May 15 to cover cross calibration issues among MODIS, MISR, and SeaWiFS. The possibility of a future DSC maneuver(s) and whether a lunar view was desired was also discussed. Preliminary flight dynamics analysis and planning for a potential third DSC maneuver is underway. The decision and final date selection for the third maneuver is anticipated by early summer.</P>

<P>During a routine calibration on May 6, the MODIS Solar Diffuser Screen failed to reopen. There are no data loss or degradation issues and the instrument is safe. An anomaly team including the GSFC-based MODIS Instrument Operations Team and Calibration Science Team, Raytheon Santa Barbara (instrument developer) and Terra Flight Operations Team has been formed and has conducted two anomaly meetings to date. A third meeting is planned for next week. A plan will be devised to reopen the door within the next several weeks. If this is not possible, techniques will be devised to compensate for lost calibration data as a result of the closed screen via alternate calibration methods (i.e., lunar rolls, etc.).</P>

<P>Plans

The May lunar roll maneuver for MODIS calibration was deferred as the required roll angle exceeded the maximum value (plus/minus 20 degrees) allowed by the mission rules. Resumption of MODIS lunar calibration roll maneuvers is anticipated in the coming months.</P>

<P>Preliminary planning indicates a need for up to three Inclination Adjust Maneuvers for Terra by late fall to maintain the approximately 10:30 a.m. descending node time and the

proper orbital relationship with the SAC-C satellite.</P>